# DEPARTMENT OF ENVIRONMENTAL QUALITY AIR QUALITY DIVISION ACTIVITY REPORT: Off-site Inspection

B602756165

FACILITY: Inteva Products Adrian Operations		SRN / ID: B6027		
LOCATION: 1450 E. BEECHER ST, ADRIAN		DISTRICT: Jackson		
CITY: ADRIAN		COUNTY: LENAWEE		
CONTACT: Perry Mulhollen , EHS Representative		ACTIVITY DATE: 11/23/2020		
STAFF: Stephanie Weems	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MAJOR		
SUBJECT: Targeted inspection conducted virtually due to COVID-19 precautions.				
RESOLVED COMPLAINTS:				

## Major / ROP Source. Full Compliance Evaluation (FCE) and Inspection (PCE) of Inteva Products LLC – Adrian.

### **Facility Contacts:**

Perry Mulhollen, EHS Representative

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#### **Purpose**

On November 23, 2020 I conducted an announced, virtual compliance inspection of the Inteva Products LLC – Adrian facility located in Adrian, Michigan (Lenawee County) at 1450 E. Beecher Street. This inspection was scheduled and conducted virtually through Microsoft Teams Meetings due to the ongoing COVID-19 pandemic and the need for increased precautions. The purpose of the inspection was to determine the facility's compliance status with applicable federal and state air pollution regulations, particularly Michigan Act 451, Part 55, Air Pollution Control Act and administrative rules, and the conditions of Inteva's Renewable Operating Permit (ROP) number MI-ROP-B6027-2018 issued April 17, 2018.

#### **Facility Location**

The facility is located within the city limits of Adrian. It is immediately surrounded by other commercial / industrial sources. See attached aerial photo.

### **Facility Background**

This facility was last inspected on July 11, 2019 and found to be in compliance.

This facility was issued a Violation Notice (VN) on September 24, 2019 citing a violation of monitoring/recordkeeping special condition VI.2 for EU-Paint3. The facility had reported a malfunctioning data logger, noting that the required records were not kept. This violation was considered resolved on October 28, 2019 when the facility notified AQD that the malfunctioning data logger had been reprogrammed. Additionally, they installed a new recording system as part of their plant database, so going forward they have two data loggers. Furthermore, they explained that they now have it set up to where an alarm will sound if temperatures fail to log, allowing for a quicker response time in correcting any issues.

The facility was also sent a VN on October 2, 2020 for failure to submit the required Semi-Annual Monitoring and Deviation report. This report is required to be submitted to AQD and postmarked by September 15, 2020. This violation was considered resolved on October 6, 2020 when AQD received the required report.

Inteva Products manufacturers instrument and door panels for General Motors vehicles. The main production operations at the facility include plastic injection molding and instrument panel assembly. The facility's ROP is for four automated spray paint lines (EU-P5, EU-Paint 1, EU-Paint 2, and EU-Paint 3) which are equipped with water-wash systems, robotic spray paint booths, and natural gas dryer ovens. EU-Paint 1 is Inteva's most advanced coating line, and is equipped with additional air pollution control equipment, including a rotary carbon concentrator (RCC) and a regenerative thermal oxidizer (RTO). A third paint booth (EU-CKIP#2) is used for more small-scale painting activities, such as small-scale service part orders. There are additional emission units (EU) that are incorporated in Inteva's ROP that operate under specific permit to install (PTI) exemptions (Rule 280 through Rule 290).

In Inteva's production process, plastic pellets used for injection molding are delivered and transferred to the facility's storage tanks. The pellets are sent through a drying process before utilization in the facility's injection molding machines. Several additional onsite emission units, not incorporated in Inteva's ROP, are exempt from the requirement to obtain a PTI and are described in the onsite narrative below.

Inteva's ROP does not specify facility-wide volatile organic compound (VOC) limits, but instead stipulates emission unit-specific VOC limits. For the 2019 reporting year, Inteva reported the following VOC emissions for their Michigan Air Emissions Reporting System (MAERS) submission:

- 7.75 tons for EU-P5 (emission limit: 55 tons per year (tpy))
- 0.00078 tons for EU CKIP#2 (emission limit: 54.4 tpy)
- 3.8 tons for EU-Paint 1 (emission limit: 40 tpy)
- 0 tons for EU-Paint 2 (emission limit: 39.5 tpy)

0.03 tons for EU-Paint 3 (emission limit: 25.0 tpy)

#### **Pre-Inspection Test Call**

A pre-inspection test call was held with Inteva on November 19, 2020. This was done to make sure that the necessary technology (Microsoft Teams) was working correctly for both parties. The test call indicated that the software and application appeared to be working on both sides.

### **Arrival & Facility Contacts**

I started the Microsoft Teams meeting at approximately 9:56 AM. I was joined by Perry Mulhollen, Environmental Health and Safety Representative. Accompanying him for the opening meeting were John Matias, Quality and EHS Manager, Mark Ellerbrock, Plant Manager, and Jeff Boll, Engineering Manager. I informed them of my intent to conduct a facility inspection and to review the emission units and control devices outlined in their permit. I also explained that any information supplied in the Microsoft Teams chat function is subject to FOIA.

They extended their full cooperation during the inspection and fully addressed my questions.

### **Regulatory Applicability**

The facility is a considered a Major/Title V source for volatile organic compounds (VOC) and hazardous air pollutants (HAP) emissions. The facility is regulated by ROP number MI-ROP-B6027-2018.

This facility is subject to the following federal standards:

- -Title 40 of the Code of Federal Regulations (CFR), Part 63, Subpart PPPP National Emission Standards for Hazardous Air Pollutants (NESHAP) for Surface Coating of Plastic Parts and Products.
- -40 CFR Part 63, Subpart A National Emission Standards for Hazardous Air Pollutants General Provisions.
- -40 CFR Part 63, Subpart ZZZZ National Emission Standards for Hazardous Air Pollutants for Reciprocating Internal Combustion Engines (also referred to as the RICE MACT).

The facility reports its emissions to MAERS and is designated as a Fee Category B source.

## **Pre-Inspection Meeting**

The pre-inspection began with gaining some basic information about the facility. Mark indicated that the facility employs approximately 650 people (includes hourly and salary). They run 3 shifts, 5 days per week (Monday-Friday) with an occasional sixth day based upon customer demand.

We discussed the changes that have occurred at the facility since the last inspection. The facility is moving towards using "in-color" injection molding more than painted processes now. Therefore, many of the processes in their ROP are currently not in operation, and the paint booths and coating lines that are in operation are not operating every day. EU-Paint 1 (connected to the RTO) and EU-Paint 2 are two of the lines that are currently not in operation. Thus, the RTO is not currently in operation.

#### **Onsite Inspection Narrative**

Perry conducted the onsite tour portion of the inspection by wheeling his computer through the site on the cart. The camera was faced outward so that I could see the plant as we were walking through. Perry was very helpful and cooperative in angling the camera so that all necessary emission units, control devices, panels, and screens could be seen.

During the facility tour portion of the inspection, Perry was accompanied by John Matias.

## **EU-ADHCT-North and EU-ADHCT-South**

EU-ADHCT-North and EU-ADHCT-South, which both operated under a Rule 290 exemption, are processes that consisted of application of an adhesive (consisting of polyurethane and isocyanate) to a plastic instrument panel substrate. It is then heated / thermoformed to join the "foam skin" to the instrument panel substrate. The final product is described as a hand-wrapped instrument panel. As of June 2018, these emission units are no longer operating. These units have been taken out of operation, and the facility now uses EU-EastBth\_013 for their adhesive booth.

#### **Rule 201/ROP Exempt Processes**

PTI Exempt Emission Unit ID	Description of PTI Exempt Emission Unit	Rule 212(4) Citation	PTI Exemption Rule Citation
EU-MISC- HEATERS	Miscellaneous Direct Fire Gas Space Heaters < 10 MMBTU/hour	d Rule 282(2)(b) (i)	Rule 212(4)(c)
EU- BOILER#35-1	Cleaver Brooks natural ga fire boiler A-35-1. 14.645 mmBTU/hour	s Rule 282(2)(b) (i)	Rule 212(4)(c)
EU- BOILER#15-2	Cleaver Brooks natural ga fire boiler A-15-2. 6.2775 mmBTU/hour	s Rule 282(2)(b) (i)	Rule 212(4)(c)

PTI Exempt	Description of PTI	Rule 212(4)	PTI
Emission Unit ID	Exempt Emission Unit	Citation	Exemption Rule Citation

#### EU-P5

EU-P5 is a coating line consisting of a three-section water wash spray booth with six robotic applicators, a natural gas-fired flash oven (used to flash off carrier solvents and begins the pre-curing process), and a natural gas-fired curing oven. This spray booth employs a downdraft system, with clean air supplied from the ceiling and is drawn out from the floor. The airstream goes through the water wash stream before being discharged to the atmosphere via the stack. This line operates about one day a week. They only run this line for one shift. As of the time of the inspection it was not operating, but work was being done on it. Perry did take us up to the operator booth where I was able to see that the line was not in operation and people were working on maintenance of the robots.

#### **EU-Paint 3**

EU-Paint 3 (also known as two-tone) is an instrument panel coating line consisting of one automatic spray dry filter booth and one natural gas-fired bake oven. This line was not operating at the time of the inspection; however I was able to see that the booth is equipped with the dry fabric filters. The filters looked very clean, and Perry indicated that they looked to have just been replaced.

### **EU-Paint 1**

EU-Paint 1 is an instrument panel paint system consisting of a robotic flame treatment system, two robotic paint booths (No. 1 and 2), followed by a flash-off tunnel (No. 1), and then followed by a natural-gas fired paint bake oven. This line is not currently being used, and during the last inspection it was noted that this line has not been used since February 2019.

#### **EU-Paint 2**

EU-Paint 2 is an instrument panel paint system consisting of a robotic flame treatment system, two robotic paint booths (Nos. 3 and 4), followed by a flash-off tunnel (No. 2), and then followed by a natural-gas fired paint bake oven (which is shared with EU-Paint 1). Each booth is equipped with a water-wash system to control particulate overspray. EU-Paint 2 is not currently being used by the facility, and the last inspection noted that it has not been used since February of 2019 and they have no intent to start using it again.

#### EUCKIP-#2

EUCKIP-#2 is a paint system that consists of a manual paint booth and paint bake ovens. Paint is applied via HVLP spray guns, and the booth is equipped with a water

wash over spray control. The booth was not operating at the time of the inspection, and Perry said that this booth has not been operated since the last inspection.

## EU-EastBth\_013

EU-EastBth\_013 was the east water wash spray booth with manual conventional spray guns. This booth is now an adhesive application booth that is operated under Rule 287(2)(c). I observed that the dry filter control was installed in the booth. This booth is only used sporadically for service parts.

### **EU-CARP-PNT**

EU-CARP-PNT is currently used to coat small-scale items using aerosol cans. The facility includes this under their Rule 287(2)(c) exempt equipment. During the inspection, we observed the booth and noted that the dry filter control was in place. The filters appeared to have been just changed out as they had very little paint on them. Perry explained that the booth is rarely used.

### EU-Touch-Up

EU-Touch-Up is for instrument panel touch-up and repair. The facility included this under their Rule 287(2)(c) exempt equipment. During the last inspection it was noted that this unit has not been used since February 2019, and Perry said it has still not been used.

#### FG-NonHalogen/ COLDCLEANERS

There are no longer any cold cleaners at the facility.

## **EU-HandAdh**

This emission unit consists of the hand application of adhesive. The facility includes this under their Rule 287(2)(c) exempt equipment. According to the last inspection report, this unit had not been in operation since May of 2018. Perry confirmed that this unit is still not being used.

## **Facility Wide Observations**

The facility appears to be well maintained. During the entire facility tour, I only observed waste material collected in closed containers, per permit requirements. Overall, Inteva appears to be practicing excellent facility housekeeping.

## **Post-Inspection Meeting**

After the facility walk through, I held a brief post-inspection meeting with Perry and John. I informed them that I did not have any other immediate concerns at that time. I explained that a report would be generated outlining the inspection, and once approved by my supervisor, a copy would be provided to the facility.

I thanked them for their cooperation and assistance and ended the meeting at 10:40 AM.

### **Recordkeeping Request**

On October 8, 2020 an email was sent to Inteva contact Perry Mulhollen requesting recordkeeping documents required by MI-ROP-B6027-2018 and other federal regulations Inteva is subject to. These records were requested as a partial compliance evaluation (PCE) conducted as part of a scheduled full compliance evaluation (FCE). Due to the ongoing COVID-19 pandemic, EGLE AQD is practicing increased caution by conducting as much of the FCE electronically/virtually as possible.

The following records request was sent to Inteva:

#### **RECORD REQUEST**

## ALL RECORDS REQUESTED ARE FROM SEPTEMBER 2019 TO PRESENT UNLESS OTHERWISE NOTED

#### <u>EU-P5</u>

- The following monthly records:
  - Gallons (with water) of each coating, reducer, hardener, purge and clean-up solevent, etc. used.
  - VOC content (minus water and with water) of each coating, reducer, solvent, etc. as applied.
  - Where applicable, gallons (with water) of each purge and clean-up solvent reclaimed.
  - VOC mass emission calculations determining the monthly emission rate in tons per calendar month.
  - VOC mass emission calculations determining the annual emission rate in tons per 12-month rolling time period as determined at the end of each calendar month.
- The following daily records:
  - Daily usage in gallons (with water) of each 2k coating applied
  - The triethylamine (CAS No. 121-44-8) content (with water) of each 2K coating applied.

#### **EU-CKIP#2**

- Monthly summary reports of any repairs, remedial action, or preventative maintenance done.
- Monthly records for usage of each coating (including water), cleanup, and purge solvent, in gallons.
- Records for the VOC content of each coating sprayed in pounds per gallon of coating (including water and minus water), as applied.
- Monthly records for the hours of operation of the process.
- Monthly VOC emission calculations including the average pound of VOC per gallon, pounds per hour, and tons per year as determined on a 12-month rolling time period, as calculated at the end of each month.

#### **EU-Paint 1**

- Records of the desorption gas inlet temperature in the rotary carbon concentrator during operation of the rotary carbon concentrator for July 2020.
- Records of the pressure drop across the filter in the rotary carbon concentrator during operation of the rotary carbon concentrator for July 2020.
- Records of the temperature in the combustion chamber of the RTO during operation of the RTO for July 2020
- Records of all bake oven temperature alarms and shutdowns. These records should include the type, date, time, and duration of each event. They should also include a listing of all corrective actions taken to correct the event.
- The following monthly records:
  - Records of each RTO bypass including dates, times, and duration at which the bypass line is open.
  - Gallons (with water) of each material used and reclaimed during period of RTO operation and RTO by-pass.
  - VOC content (minus water and with water) of each material as applied.
  - VOC mass emission calculations determining the monthly emission rate during periods of RTO operation and RTO by-pass in tons per calendar month.
  - VOC mass emission calculations determining the annual emission rate in tons per 12-month rolling time period as determined at the end of each calendar month.
- Records of monitoring data, monitor performance data, corrective actions taken, any written quality improvement plan and any activities undertaken to implement a quality improvement plan, and other information such as data used to document the adequacy of monitoring, or records of monitoring maintenance or corrective actions.

#### **EU-Paint 2**

- The following monthly records:
  - Gallons (with water) of each material used and reclaimed.
  - VOC content (minus water and with water) of each material as applied.
  - VOC mass emission calculations determining the monthly emission rate in tons per calendar month.
  - VOC mass emission calculations determining the annual emission rate in tons per 12-month rolling time period as determined at the end of each calendar month.
- Records of all bake oven temperature alarms and shutdowns. The records should include the type, date, time, and duration of each event. They should also include a listing of all corrective actions taken to correct the event.

#### **EU-Paint 3**

- Records of the bake oven temperature for July 2020.
- The following monthly records:
  - Gallons (with water) of each material used and reclaimed
  - VOC content (minus water and with water) of each material as applied

- VOC mass emission calculations determining the monthly emission rate in tons per calendar month
- VOC mass emission calculations determining the annual emission rate in tons per 12-month rolling time period as determined at the end of each calendar month.

#### **FG-MACT PPPP**

• All records necessary to show compliance with 40 CFR Part 63, Subpart PPPP.

### FG-NonHalogen/COLD CLEANERS

- For each new cold cleaner in which the solvent is heated, weekly records of solvent temperature.
- The following information for each cold cleaner:
  - A serial number, model number, or other unique identifier for each cold cleaner
  - The date the unit was installed, manufactured, or that it commenced operation.
  - The air/vapor interface area for any unit claimed to be exempt under Rule 281(2)(h)
  - The applicable Rule 201 exemption
  - The Reid vapor pressure of each solvent used
  - If applicable, the option chosen to comply with Rule 707(2)

## **FG-RULE287(2)(c)**

- Monthly records of volume of coating used, as applied, minus water, in gallons, for each emission unit.
- Documentation for each emission unit of any filter replacements or maintenance of water wash control for exhaust systems serving coating spray equipment, or other documentation included in a plan developed by the owner or operator of the equipment.

### FG-RULE290

- The following monthly records for each emission unit:
  - Records identifying each air contaminant that is emitted.
  - Records identifying if each air contaminant is controlled or uncontrolled
  - Records identifying if each air contaminant is either carcinogenic or noncarcinogenic
  - Records identifying the ITSL and IRSL, if established, of each air contaminant that is being emitted under the provisions of Rules 290(2)(a) (ii) and (iii)
  - Records of material use and calculations identifying the quality, nature, and quantity of the air contaminant emissions in sufficient detail to demonstrate the that actual emissions of the emission unit meet the emission limits outlined in the ROP table and Rule 290.
- An inventory of each emission unit that is exempt pursuant to Rule 290. This inventory shall include:

- A written description of each emission unit as it is maintained and operated throughout the life of the emission unit
- For each emission unit that emits noncarcinogenic particulate air contaminants pursuant to Rule 290(2)(a)(iii), the permittee shall maintain a written description of the control device, including the designed control efficiency and the designed exhaust gas flow rate.
- Monthly visible emission observation records for each emission unit that emits noncarcinogenic particulate air contaminants pursuant to Rule 290(2)(a)(iii).

## Recordkeeping Review

On October 30, 2020 the requested recordkeeping documents were received from Inteva via email.

The submission included a document (titled Summary of Record Request) that outlined what spreadsheets to find the requested information on. This made it easier to go directly to the requested information. Furthermore, this document outlined that EU-CKIP#2, EU-Paint1, and EU-Paint2 have not been operational during the requested time frame. Additionally, the facility does not have any cold cleaners or emission units operating under Rule 290 (so no emission units reporting under FG-RULE290).

The spreadsheet titled 2020 Air Emission Data Tracking Sheet provides facility-wide information broken down by emission unit/flexible group. (The spreadsheet titled Title V Recordkeeping 2019 provides the same information for calendar year 2019). This document provides the following information:

- The monthly and 12-month rolling VOC emission calculations for EU-P5 and EU-Paint3. A review of these records shows that Inteva is meeting the VOC emission limit of 55.0 tpy on a 12-month rolling time period for EU-P5 and the VOC emission limit of 25.0 tpy for EU-Paint 3. As of September 2020, the facility reports a 12-month rolling VOC emission total of 4.66 tpy for EU-P5 and a 12-month rolling VOC emission total of 0.19 tpy for EU-Paint 3.
- The recordkeeping for FG-RULE287(2)(c) documenting the number of gallons of paint used in each emission unit operating under FG-RULE287(2)(c). A review of these records shows that EU-Touch-Up and EU-HandAdh have not been used in 2020. Furthermore, EU-CARP-PNT has used 2.8 gallons of paint for all of 2020, and EU-Eastbth-013 has used 4.5 gallons of paint for all of 2020. These records show compliance with the recordkeeping requirements and material limits for FG-RULE287 (2)(c).
- The material content information is included in this spreadsheet as well. This information outlines the product weight, specific gravity, total volatiles as received, VOC content as received, Volatile HAPS as received, solids content, percent volume of exempt solvents as received, percent volume of water as received, percent weight of water as received, VOC percent by weight, VOC content pounds of VOC per gallon as applied, WOC content pounds of VOC per gallon as applied, minus water, and the Triethylamine (TEA) content percent by weight as applied.
  - None of the coatings reported have a TEA content greater than 0.86% by weight as applied.

- EU-P5 has a material limit for 2K coatings of 508 gallons per day as applied over a calendar day. An initial review of the records appears to show EU-P5 meets this limit, but an email was sent to Perry to request clarification on what 2K coatings are used in EU-P5.
  - Perry indicated that all of the coatings that are used on EU-P5 are considered 2K (2-part) coatings. Another review of the records shows that not more than 508 gallons of coatings was used in a single day.
- EU-P5 also has a material limit of 3.0 lb/gallon (minus water) as applied for VOC content of air-dried plastic automotive interior parts coatings. A review of the records shows that one of these materials may be over that limit (IPA Blend with a reported VOC content of 3.49 lb/gal as applied minus water). An email was sent to Perry for more information regarding the use of this material.
  - Perry's response explained that the IPA Blend is a solvent that is used to clean the lines. The purged material is then collected in drums and disposed of as hazardous waste. Since the permit specifies that the term "minus water" includes organic solvents, this appears to be in compliance.
- EU-Paint 3 has a material limit of 4.6 lb/gal (minus water) as applied of VOC for air-dried plastic automotive interior parts coatings. Based upon review of the information provided, it appears that all of the coatings are below this material limit.

Overall, it appears that the information provided in the 2019 and 2020 spreadsheets shows compliance with the recordkeeping requirements, emission limits, and material limits for EU-P5, EU-Paint3, and FG-RULE287(2)(c).

The spreadsheet titled Paint Temp Monitor July 2020 shows the requested records for the bake oven temperature for EU-Paint 3. Since EU-Paint3 is required to have airdried coatings, this means the oven temperature must be kept below 195 degrees F. A review of these records shows that, during the month of July 2020, the oven temp reached 195 degrees twice. This temp was only maintained for less than 15 seconds each time, showing that the oven is set to decrease the heat when it reaches the 195 degree limit.

Lastly, Inteva included spreadsheets for each month requested that document daily usage, solvent usage, solvent waste generated, solvent reclaimed, and waste collected for EU-P5. These records are required by the ROP for EU-P5 and appear to show compliance with the recordkeeping requirements.

Overall, Inteva appears to be in compliance with their emission limits, material limits, and recordkeeping requirements.

Rule 286(2)(b) applies to the injection molding processes and associated resin handling and storage equipment (silos and piping).

Rule 287(2)(i) applies to the hot-melt adhesive application booths.

Regarding Subpart PPPP, review of required compliance reports shows that the facility reports easily meeting the standard of 0.16 pounds of HAPs per pound of coating solids.

## **Compliance Summary**

Based upon the facility inspection, review of the records, and review of applicable requirements the company was found to be in compliance at the time of this inspection.



Image 1(1): Aerial view

Steph Weems		E.
NAME	DATE 11/24/2020	SUPERVISOR